

SuperSoft C Compiler

FOR Z80
8080
8086
8088
Z8001
AND Z8002

SuperSoft®

FIRST IN SOFTWARE TECHNOLOGY P.O.Box 1628 Champaign, IL 61820 (217) 359-2112 Telex 270365

SuperSoft C Compiler for Z80, 8080, 8085, 8086, Z8001 and Z8002

The new version of SuperSoft's C compiler is fully portable, is syntactically compatible with and contains almost all the features of UNIX version 7 C, is rigorously tested, is fast in both compilation and execution, and is packed with more library functions than any other C available.

SuperSoft has been working on its various C compilers for over three years. This has given our C compilers several advantages in the areas of features, reliability, portability, and performance.

Many of SuperSoft's commercial programs, including the C compiler itself, have been developed using SuperSoft C. This compiler has also been used by a wide variety of other professional software houses for developing commercial software applications. All this use and testing has resulted in a compiler that is highly reliable in every phase of operation.

SuperSoft C is now commercially available under CP/M, CP/M-86, MS DOS, PC DOS, and ZMOS on the Z8000. It is also available to OEMs under UNIX, XENIX, and other UNIX-like operating systems. Future availability under several new operating systems is also planned. C source code is compatible under all versions.

The new C manual is very thorough. It provides complete explanations and examples on the use of SuperSoft C and its related library functions. Any additional questions can be answered by using the SuperSoft technical hotline.

Several widely desired features of SuperSoft C include:

- **Macro expansions via the #define statement**
- **Include files using the #include statement**
- **Chaining is supported with the "excel" function**

- **Overlays are supported under CP/M-80 with the optional ELINK package, SuperSoft's overlay linker, and under CP/M-86 with Digital Research's LINK-86**
- **Inline assembly code is supported with the #asm and #endasm**
- **The object code may be ROMed**
- **Programs may be ORGed at any location**
- **Completely dynamic memory allocation is supported, both by the compiler and in user programs. (That is, the functions "alloc" and "free" are provided with the compiler.)**
- **Two I/O systems are provided, one which allows read/write/seek by sector, and one which allows read/write/seek by byte. (That is, arbitrary record size.)**
- **True register variables are supported**
- **Direct BIOS/BDOS calls are allowed**
- **Largest allowable data object, such as an array, is 64K (no other C compiler has a larger allowable data object.)**
- **39 compiler options**
- **Functions can be loaded individually**
- **All library functions are delivered in source form**

SuperSoft C is a multi-pass compiler. Intermediate code is optimized and assembly code is output to disk file. The optimizer is extremely efficient, producing object code which runs nearly as fast as that which is written in assembly code.

And because assembly code output is produced, hand-optimization of specific sections is possible. This is especially important in applications where reliable performance is critical.

SuperSoft C compiler: for Features, Reliability, Portability, and Performance under CP/M, CP/M-86,

080, 8086, 8088,

The SuperSoft C compiler has a very complete set of library functions, all delivered in source form, which are listed below according to use:

SYSTEM ACCESS:

bdos inp
bios outp
exit inp16
ccexit outp16
ccall cpmver
ccalla xmain
comlen lock
comline nice

CONTROL FLOW:

exec setjmp
execl setexit
longjmp sleep
reset wait
pause

CONSOLE I/O:

getchar putchar
gets putdec
kbhit puts
scanf printf
ugetchar

BUFFERED FILE I/O:

fclose fread
fflush fscanf
fgetc fwrite
fgets getc
fopen getw
fprintf putc
fputc putw
fputs ungetc
fdopen freopen
pgetc clearerr
pputc ferror
get2b put2b
fileno

DIRECT FILE I/O:

close rtell
creat seek
open tell
otell write
read access
chmod

MEMORY INITIALIZATION:

initb peek
initw poke
movmem getval
setmem

GENERAL FILE:

fabort rename
unlink link
perror errno
isfd isatty
mktemp

NUMERIC:

abs absval
max min
rand srand
double long
assert

STRING PROCESSING:

itoa xrprintf
index xrscanf
isprint rindex
isspace sprintf
ispunct sscanf
iswhite strcat
isalnum strcmp
isalpha strcpy
isascii streq
iscntrl strlen
isdigit strncat
isupper strncmp
islower strncpy
substr isnumeric
qsort tolower
swab toupper.

DYNAMIC MEMORY ALLOCATION:

alloc malloc
calloc realloc
brk sbrk
ubrk wrdbrk
evnbrk free
xrev isheap
topofmem

In addition, there is no license fee for the run time portion of your compiled code. This makes SuperSoft C compiler perfect for professional program developers.

SuperSoft's NEW C Compiler ...when quality counts.



In 1982 SuperSoft helped C programmers around the world move their applications from 8 to 16 bit operating systems with the first C compiler under CP/M-86®, PC DOS, and MS DOS.

With SuperSoft's new release of version 1.2.6, with its enhancements, upgrades, and improvements SuperSoft is helping those programmers stay ahead of the pack. SuperSoft was there when it counted in 1982 and will continue to be there for you in the future. Today there are several C compilers on the market, and you can look at them all. But if you want a C that's fully portable, syntactically compatible with UNIX version 7 C, rigorously tested, fast in both compilation and execution, packed with more library functions than any other, and produces a very highly optimized assembly code...then you'll find only one. The SuperSoft C compiler.

Professional Quality

Recently companies have been scrambling to catch up by releasing C compilers. SuperSoft started working on C over three years ago, and the work has never stopped. While others were struggling to put in features, SuperSoft was refining and polishing...adding the quality professionals depend on.

Thoroughly Tested

SuperSoft C has been tested with hundreds of commercial application programs. And all this testing has paid off...with a compiler that's highly reliable in every phase of operation.

Portable

SuperSoft C is now available in most operating system environments. Since we don't sell operating systems, we can support them all. And as new operating systems become popular, SuperSoft C will be there.

Packed with Library Functions

SuperSoft now has the most complete set of library functions available. All provided with source code.

Thorough User Manual

The new user manual is extensive—jammed with thorough explanations to help you every step of the way. And our technical hotline can help answer any additional questions.

SuperSoft's line of fine language compilers includes Fortran, BASIC, Ada, and C.

So when quality counts, think SuperSoft.

SuperSoft C, CP/M version: \$275.00
all other versions: \$500.00

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Disk-Edit is a uniquely powerful disk data manipulation tool which gives you access to every bit of information on your disk. It lets you read disk data in both HEX and ASCII, "text edit" any information on your disk, restructure disk information, and save lost or scrambled data. Imagine scrolling through your disk data, jumping between HEX and ASCII windows at will, and editing information anywhere on your disk. Usable with all floppy and hard disk systems. (CP/M-80, CP/M-86, MS DOS, PC DOS): \$100

Star-Edit

Star-Edit is a powerful screen editor with an outstanding list of text editing commands tailored to program development. It can greatly simplify all your editing tasks, such as moving and reproducing blocks of text or code; viewing two files simultaneously through separate windows; moving blocks of text or code between different files; searching forward or backward; and moving to the beginning or end of any word, sentence, paragraph, parentheses, or curly brackets. Star-Edit gives you the power and flexibility you've always needed for faster, more efficient editing. (CP/M-80, CP/M-86, MS DOS, PC DOS): \$225

SuperSoft A

A true Ada* Subset

SuperSoft A is a completely standard subset of the Ada language. It contains over 65% of the standard Ada syntax, including packages and separate compilation. No non-standard extensions have been included, and, as a result, code written in SuperSoft A is completely portable to other Ada environments. Start programming in Ada now with SuperSoft A. (CP/M-80): \$300

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Elink

Elink is a disk-based linker allowing you to link up to 64K on a CP/M-80 system and build executable files larger than 64K. It also provides up to 256 levels of overlays. All overlays can be put into a single file if you so choose, and relocatable files may be gathered together into libraries and searched at link time. Elink also allows large programs to be divided into segments which do not require resolution at execution time. Elink . . . for powerful overlay linking capabilities. (CP/M-80): \$250

Macro I: A macro assembler for SuperSoft FORTRAN. (CP/M-80): \$80

Utilities I & II: Two unique assortments of valuable programming aides. (CP/M-80): \$60 each

Other SuperSoft Products . . .

Diagnostics II

Diagnostics II is the finest set of system diagnostics programs available for microcomputers. It thoroughly checks the five main areas of your system – your terminal, printer, disk drives, memory, and CPU – isolating many problems to the chip level! This is the same tool we developed for the service technicians of companies such as NCR, XEROX, and Sony. We are now making Diagnostics II available to you to help save you money by eliminating service calls, downtime, and data loss due to hardware failure. (CP/M-80, CP/M-86, MS DOS, PC DOS): \$125

BASIC TUTOR

BASIC TUTOR makes learning BASIC easy. From the beginning of the first lesson, BASIC TUTOR gives clear, step-by-step instructions for programming in BASIC. By the end of the ninth lesson you'll be writing complete BASIC programs of your own. So introduce yourself and your family to BASIC with the best tutor around – BASIC TUTOR – specially designed for your Apple computer. (Apple II⁺ and IIe): \$99

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Now you can recover "crashed" diskettes and lost files automatically! With Disk Doctor you can easily "un-erase" files, copy information from faulty disks, and even recover important information from "crashed" files. Disk Doctor helps cure your computer ills – letting you quickly recover from those data-loss disasters. (CP/M-80): \$100

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Stats-graph: A program that lets you prepare graphs without expensive graphics hardware. (CP/M-80, CP/M-86, MS DOS, PC DOS): \$200

LISP Interpreter: A standard LISP interpreter which conforms to accepted usage. (CP/M-80): \$150

SuperSoft FORTH: A 1977 standard FORTH which produces compact executable modules. (CP/M-80): \$200

Tiny Pascal: A small version of Pascal which comes complete with source code to the entire compiler and runtime libraries. (CP/M-80): \$85

Analiza II: A computerized psychiatrist which provides fascinating computer entertainment. (CP/M-80): \$50

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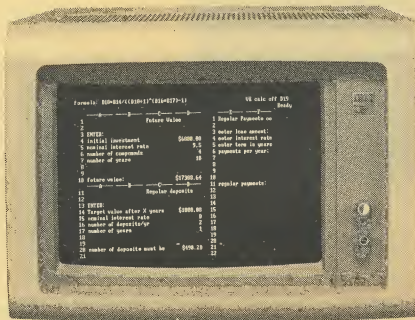
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ScratchPad Plus is the advanced electronic spreadsheet designed for the business professional which does away with those disastrous "out of memory" messages. It lets you use up to 25,000 cells in any spreadsheet application. (This limit is somewhat smaller on CP/M-80 systems.) ScratchPad Plus also allows you to create spreadsheets up to 9999 columns wide or 9999 rows deep, and every cell can be used. In addition, you never need more than 192K memory.

ScratchPad Plus also offers such advanced features as multiple windowing, cell protection, sorting, merging, virtual memory, flexible grid, BCD math for greater accuracy, consolidation, justification of text, and our unique single-hand entry feature which speeds spreadsheet development. Add to this the ability to read files created by other spreadsheets, and you can easily see how ScratchPad Plus out-performs the competition. So, upgrade your spreadsheet to the powerful capabilities of ScratchPad Plus — the spreadsheet that never lets you run out of memory.

ScratchPad Plus (CP/M-80, CP/M-86, MS DOS, PC DOS): \$195
ScratchPad Plus Demo: \$19.95

ScratchPad with VoiceDrive

For the ultimate in human/computer communications, you can also get ScratchPad with VoiceDrive, allowing you to run the entire spreadsheet without having to touch the keyboard! Imagine how that will improve "hands-off" demonstrations such as board room presentations.

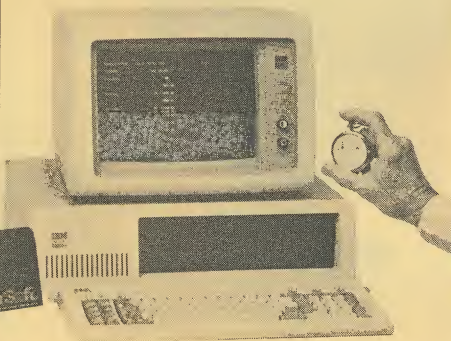
ScratchPad with VoiceDrive (IBM PC): \$495

ScratchPad with VoiceDrive with Tecmar voice card (IBM PC): \$995

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The Data Base Manager That Understands You

DAX Plus is a sophisticated yet easy-to-use data management system, ideal for applications as simple as mailing lists or as complicated as inventory/payroll/accounting systems. You can command DAX Plus through menus or by using simple English sentences. If you can speak English, you can use DAX Plus. That will help any user get up to speed fast!



The main features of DAX Plus include a data base generator; a data entry section; an inquiry processor for sorting, searching, file manipulation, and automatic report creation; a built-in text editor and formatter; and a batch programming language for the creation of complex applications. DAX Plus is an amazingly powerful data manager at a very reasonable price.

DAX Plus (MS DOS, PC DOS): \$349

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Most business software just lets you examine business problems and perform simple analyses. But the Optimizer takes the next step — it actually solves business problems for you.

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The Optimizer (IBM PC, Apple II or IIe, CP/M-80): \$200

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SuperSoft Languages

When Performance Counts

A programmer's most important software tool is the language compiler or interpreter he uses. He has to depend on it to work and work well.

At SuperSoft, we believe it. That's why we offer three excellent compilers: SuperSoft FORTRAN, SuperSoft C, and SuperSoft BASIC. They answer the programmer's need for rock solid, dependable performance on microcomputers.

SuperSoft FORTRAN

With large code and data.

SuperSoft FORTRAN version 2.0 with large code and data space is now available under MS DOS and PC DOS. It gives you the power to compile extremely large FORTRAN programs on micros. It allows double precision and complex numbers, full IEEE floating point, and a full range of other important features for the serious FORTRAN programmer.

Both 8087 support and a RATFOR preprocessor are optionally available.

FORTAN (CP/M-80 & 86, MS DOS, PC DOS): \$425

Small model under PC DOS and MS DOS: \$325

8087 support: \$50

RATFOR: \$100

SuperSoft C

SuperSoft C is a high-powered, full-featured C compiler designed for serious C applications. It is fast — both in compilation and execution, and it is packed with more than 135 library functions (all delivered in source code form). SuperSoft C produces optimized assembly code, and object code can be ROMed.

SuperSoft C (for CP/M-80, CP/M-86, MS DOS, PC DOS): \$350



SuperSoft BASIC

The SuperSoft BASIC compiler lets you get serious with business and financial programs. It uses BCD math to give you highly accurate results for demanding applications. SuperSoft BASIC is a true native code compiler that is generally compatible with Microsoft's BASIC interpreter. And an additional bonus — no run time license fee is required.

SuperSoft BASIC Compiler (for MS DOS, PC DOS, and CP/M-86): \$300

Also available for programmers:

Star-Edit, a full-featured programmer's text editor: \$225.00

Disk-Edit, an invaluable programmer's disk data editor: \$100.00

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In conjunction with SuperSoft, SuperSoft FORTRAN was developed by Small Systems Services, Urbana, IL, a leader in FORTRAN development.

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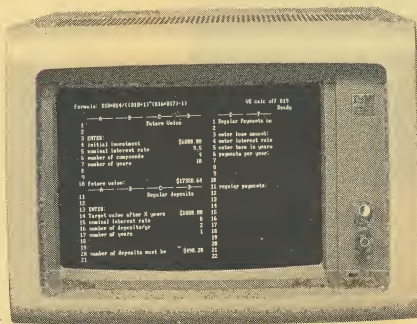
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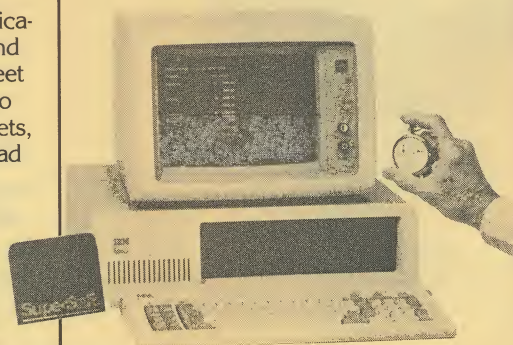
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